

What is claimed is:

1. A solid-state electronic imaging device comprising:
  - a lot of photoelectric conversion elements arranged in the column direction and the row direction;
  - 5 vertical transfer paths for transferring signal charges respectively accumulated in said photoelectric conversion elements in the vertical direction;
  - 10 transfer gates for respectively shifting the signal charges accumulated in the photoelectric conversion elements to said vertical transfer paths upon receipt of transfer gate pulses;
  - 15 a horizontal transfer path for horizontally transferring the signal charges transferred from the vertical transfer paths;
  - 20 color filters respectively formed on the photoelectric conversion elements and arranged such that the order of color signal components respectively represented by the signal charges substantially corresponding to one row which are inputted to the horizontal transfer path in reading out all pixels is a repetition of a red signal component, a green signal component, a blue signal component, and a green signal component, and the respective timings at which the red signal component and the blue signal component are outputted in odd rows are reverse to those in even rows; and
  - 25 readout control means for applying the transfer gate pulses to said transfer gates such that the order of color signal components respectively represented by the signal

charges substantially corresponding to one row which are inputted to the horizontal transfer path is a repetition of a red signal component, a green signal component, a blue signal component, and a green signal component in every other row, and

5 the respective timings at which the red signal component and the blue signal component are outputted in odd rows are reverse to those in even rows.

2. The solid-state electronic imaging device according to claim 1, wherein

10 said photoelectric conversion elements are in a honeycomb arrangement where they are arranged in odd rows or even rows with respect to odd columns and arranged in even rows or odd rows with respect to even columns, and

15 the color filters which allow the transmission of a green light component are respectively arranged in said photoelectric conversion elements in odd rows or even rows, and the color filters which allow the transmission of a blue or red light component are alternately arranged for each column and for each row in said photoelectric conversion elements in even rows or odd rows.

20 3. The solid-state electronic imaging device according to claim 1, wherein

25 said color filters are in a G-stripe R/B checkered arrangement where the color filters which allow the transmission of a green light component are arranged in a vertical stripe shape, and the color filters which allow the transmission of a blue or red light component are arranged in

a checkered shape.

4. In a solid-state electronic imaging device comprising a lot of photoelectric conversion elements arranged in the column direction and the row direction, vertical transfer paths 5 for transferring signal charges respectively accumulated in said photoelectric conversion elements in the vertical direction, transfer gates for respectively shifting the signal charges accumulated in the photoelectric conversion elements to said vertical transfer path upon receipt of transfer gate

10 pulses, and a horizontal transfer path for horizontally transferring the signal charge transferred from the horizontal transfer paths, a method of controlling the operation of the solid-state electronic imaging device is characterized in that

15 forming and arranging color filters respectively on the photoelectric conversion elements such that the order of color signal components respectively represented by the signal charges substantially corresponding to one row which are inputted to the horizontal transfer path in reading out all pixels is a repetition of a red signal component, a green signal 20 component, a blue signal component, and a green signal component, and the respective timings at which the red signal component and the blue signal component are outputted in odd rows are reverse to those in even rows, and

25 applying the transfer gate pulses to said transfer gates such that the order of color signal components respectively represented by the signal charges substantially corresponding to one row which are inputted to the horizontal transfer path

is a repetition of a red signal component, a green signal component, a blue signal component, and a green signal component in every other row, and the respective timings at which the red signal component and the blue signal component are outputted in odd rows are reverse to those in even rows.